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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,602	07/22/2003	Ming-Hung Lee	BHT-3212-33	5831

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EXAMINER

HALEY, JOSEPH R

ART UNIT PAPER NUMBER

2627

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/623,602

Applicant(s)

LEE ET AL.

Examiner

Joseph Haley

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Moon et al. (US 4669004).

In regard to claim 1, the prior art teaches a searching and recording method to search a corresponding replacement block for a defect block in an optical recording medium, so as to correctly record digital data onto said optical recording medium, the optical recording medium comprising a plurality of sequentially arranged defect management areas (DMAs), each DMA having a data area (DA) and a spare area (SA), both of said DA and SA comprising a plurality of blocks for recording digital data, each said block being coded with a corresponding address for identification, and said optical recording medium further comprising a defect table, which has a plurality of defect table blocks (DTB), each said DTB corresponding to one of said DMA in said optical record medium and comprising a plurality of predetermined recording entries corresponding one by one to the blocks of said SA (fig. 1), said searching and

recording method comprising the following steps: in said optical record medium, when the digital data, which are designated to record on a predetermined block in the DA of a target DMA, are determined to be recorded on another block, inspecting whether a target DTB corresponding to the target DMA still has an idle recording entry; and when said idle recording entry is searched in a replacement DTB, recording the digital data in a replacement block corresponding to said idle recording entry, wherein said replacement block is in the SA corresponding to said replacement DTB (see paragraph 8); however, the prior art does not teach if there is no idle recording entry in said target DTB, searching said DTBs adjacent to said target DTB for any said idle recording entry by sequentially leapfrogging around said target DTB back and forth (column 22 lines 63-68 and column 23 lines 1-10).

Moon et al. teaches leapfrogging to find the closest Spare Area. (column 22 lines 63-68 and column 23 lines 1-10).

The two are analogous art because they both deal with the same field of invention of defect management on a recording medium.

At the time of invention it would have been obvious to one of ordinary skill in the art to provide the defect management of the prior art with the spare area searching method of Moon et al. The rationale is as follows: At the time of invention it would have been obvious to provide the defect management of the prior art with the spare area searching method of Moon et al. because it would minimize the amount of actuator movement.

In regard to claim 2, the prior art teaches if there is at least one idle recording entry in the corresponding target DTB, record the digital data in a replacement block corresponding to said idle recording entry in the SA of said target DMA (paragraph 8 lines 10-13).

In regard to claim 3, the prior art teaches a replacement determination module is used for determining whether the digital data should be recorded in another block (the prior art teaches defect management on a disc there must be something to determine defects).

In regard to claim 4, the prior art teaches if the digital data is designated to be recorded in the predetermined block of said optical record medium but the predetermined block contains defect, the replacement determination module determines that the digital data has to be recorded in another block (the prior art teaches defect management on a disc the replacement determination module must record this data in another block).

In regard to claim 5, the prior art teaches if an abnormal operation occurs while reading the digital data from said optical record medium, the replacement determination module will determine that the digital data has to be recorded in another block (the optical system determines which sectors are defective while reading the sectors).

Apparatus claims 8-10 are drawn to the apparatus corresponding to the method of using same as claimed in claims 1 and 4-5. Therefore apparatus claims 8-10

correspond to method claims 1 and 4-5, and are rejected for the same reasons of anticipation as used above.

Claims 6, 7 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Moon et al. further in view of Official Notice.

In regard to claims 6, 7 and 11-12 the prior art and Moon et al. teach all the elements of these claims except wherein the medium is a CD-RW or DVD-RW.

The Examiner takes Official Notice that the use of these two discs is well known in the art.

At the time of invention it would have been obvious to one of ordinary skill in the art to provide the apparatus of the prior art with the spare area searching method of Moon et al. and a CD-RW or DVD-RW. The rationale is as follows: At the time of invention it would have been obvious to provide the apparatus of the prior art with the spare area searching method of Moon et al. and a CD-RW or DVD-RW because these two types are re-writable.

### ***Response to Arguments***

Applicant's arguments filed 7/6/06 have been fully considered but they are not persuasive. Applicant argues on page 6, paragraph 3, that "In comparison, the claimed method conducts search on the defect table blocks (DTB) of a defect table while Moon conducts search on the spare sectors of the cylinders". However the examiner maintains this rejection because the applicant's prior art conducts a search on the defect table blocks of a defect table. However it does not use the claimed leapfrogging

method of the present invention. Moon uses this leapfrogging method to search for the nearest spare sector; therefore, the combination of these two methods would be obvious to one of ordinary skill in the art.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

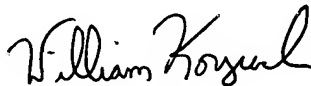
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Haley whose telephone number is 571-272-0574. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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